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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,943	07/25/2003	Dimitri Azar	00633-030002	3682
26161	7590	04/06/2005	EXAMINER	
FISH & RICHARDSON PC 225 FRANKLIN ST BOSTON, MA 02110			MATTHEWS, WILLIAM H	
			ART UNIT	PAPER NUMBER
			3738	

DATE MAILED: 04/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

5P

Office Action Summary	Application No. 10/627,943	Applicant(s) AZAR, DIMITRI	
	Examiner William H. Matthews (Howie)	Art Unit 3738	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-8,10,11,14-16,22-24,27-29,31 and 48-58 is/are pending in the application.
 4a) Of the above claim(s) 50-52 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-8,10,11,14-16,22-24,27-29,31,48,49 and 53-58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 12-22-04 have been fully considered but they are not persuasive.
2. Regarding claim 1 in view of Grendahl Applicant contends Grendahl does not necessarily provide a rangefinder and controller freeing both hands for other uses, and eliminating the danger of accidents in which a finger momentarily exerts a force far in excess of what is required to focus the lens. The Examiner disagrees because the claims merely require a rangefinder for estimating distance that is connected to a controller for controlling actuation of the lens. Grendahl clearly provides inherency of a user fulfilling the rangefinder and a controller for exerting control over the piezoelectric means.
3. Regarding claim 22, the pressure transducer disclosed by Grendahl is the piezoelectric material 108,110 within loops 104,106.
4. Regarding claim 22 in view of Pionsenka, Applicant understood the transducer to be the cornea tracker 76. However the Examiner reads the computer system 71 which receives stimulus from rangefinder to be the transducer as described in the previous office action.

Election/Restrictions

5. Newly submitted claims 50-52 are directed to an invention that is independent or distinct from the invention originally claimed (liquid nematic crystal lens) for the following reasons: claims 50-52 are drawn to a lens system involving moving lenses or lens changing shape.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 50-52 have been withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1,3-8,10,11,14-16,22-24,31,48,49,54-56 are rejected under 35 U.S.C. 102(b) as being anticipated by Grendahl US PN 4,787,903.

Grendahl discloses in abstract, figures, columns 2-4, and figures 9-12 an intraocular lens system for implantation in an eye comprising an actuator 26, lens of

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liquid nematic crystal 24, piezoelectric transducer 108/110, and controller. Manual focusing and rangefinder are inherently provided by the user through the piezoelectric means.

3. Claim 22,48,53 is rejected under 35 U.S.C. 102(b) as being anticipated by Pionsenka et al. US PN 5,359,444.

Pionsenka et al. discloses in abstract, figures, lines 34 of col. 1 through line 11 of col. 2, and lines 33 of col. 3 through line 41 of col. 6 a prosthetic lens system comprising an actuator 55, lens of liquid nematic crystal 63, transducer 71 detecting stimulus from the eye, rangefinder 75, and controller 70.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 27-28,57,58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grendahl US PN 4,787,903 as applied to claim 1 above, and further in view of Pionsenka et al. US PN 5,359,444.

Grendahl meets the structural limitations of claims 27-28,57,58 as described above but lacks the express written disclosure of using an infrared autofocus system. Pionsenka et al. teaches in lines 23-42 of col. 5 a prosthetic lens system having an

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infrared autofocus system in order to determine distance to objects and the proper the index of refraction of the prosthetic lens.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the prosthetic lens assembly disclosed by Grendahl by using an infrared autofocus system as taught by Pionsenka et al. in order to determine distance to objects and the proper the index of refraction of the prosthetic lens.

6. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Grendahl US PN 4,787,903, as modified by Pionsenka et al. US PN 5,359,444, as applied to claim 27 above, and further in view of Freger US PN 5,793,704.

Grendahl as modified by Pionsenka et al. meets the structural limitations of claim 29 as described above but lacks the express written disclosure of using a feedback loop with the autofocus system. Freger teaches in figure 6 a rangefinder system including a feedback loop in order to more efficiently determine distance to objects.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the lens assembly disclosed by Grendahl as modified by Pionsenka et al. by using an infrared autofocus system with a feedback loop as taught by Freger in order to more efficiently determine distance to objects.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Matthews (Howie) whose telephone number is 571-272-4753. The examiner can normally be reached on Monday-Friday 10-6:30PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine M. McDermott can be reached on 571-272-4754. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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